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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,261	03/10/2004	Theodore D. Rees	ELAN-01110US2	5359

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EXAMINER	
ALUNKAL, THOMAS D	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,261	REES ET AL.	
	Examiner	Art Unit	
	Thomas D. Alunkal	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the write strategy generator (WSG) implements write strategies". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Seki et al (hereafter Seki) (US 5,680,384) and in view of Kelly et al (hereafter Kelly) (US 2002/0114244).

Regarding claim 1, Seki discloses a laser driver integrated circuit (LCID) to drive a laser diode that is located on an optical pick-up unit (OPU) with the LDIC (Column 9, lines 10-13 and Figure 3, Element 20), the LDIC including: an automatic power

controller (APC) to control the output of the laser diode to compensate for changes in characteristics of the laser diode (Column 9, lines 22-26 and Column 12, lines 13-46), wherein the APC includes its own dedicated offset, gain and sample and hold circuitry, thereby reducing an amount of analog signals to be sent over a flex cable between the OPU and a main board (Column 9, line 55-Column 10, line 9 and Figure 8). Seki does not disclose a running optical power controller (ROPC) to control the output of the laser diode to compensate for variations in an optical media and a write strategy generator. In the same field of endeavor, Kelly discloses a running optical power controller (ROPC) that compensates for variations on an optical media (Paragraph 69). Kelly also discloses a write strategy generator that implements write strategies (Paragraph 67).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the running optical power controller and write strategy generator of Kelly to the laser emission unit of Seki, motivation being that providing these well known components of a pickup apparatus to the wafer disclosed by Seki, rather than their conventional placement on the main board, results in a reduction of manufacturing cost and time (Column 10, lines 33-41) and a reduction in noise during the communication between components (Column 10, lines 1-8).

Regarding claim 2, Seki discloses wherein the APC is adapted to receive power control signals over the flex cable that connects the OPU with a controller on the main board (Column 11, lines 26-29), and wherein the LDIC determines a current for which to drive the laser diode, based at least in part on the power control signal (Column 9, lines 22-26).

Regarding claim 3, Kelly discloses wherein the ROPC is used by the LDIC to determine the current for which to drive the laser diode (Paragraph 69).

Regarding claim 4, Seki discloses a chip-set to be located on an optical pick-up unit (OPU) that can communicate with components on a main board over a flex cable (Figure 3-4 and Column 7, line 64-Column 8, line 3), the chip-set comprising: a laser driver integrated circuit (LDIC) adapted to drive a laser diode (Column 9, lines 10-13), the laser driver including an automatic power controller (APC) (Column 9, lines 24-27 and Column 12, lines 13-46), a power monitor integrated circuit (PMIC) to monitor the laser diode, the PMIC including its own dedicated offset, gain and sample-and-hold circuitry (Column 9, line 55-Column 10, line 9 and Figure 8), and a photo-detector integrated circuit (PDIC) to detect light produced by the laser diode after the light as been reflected from an optical media, the PDIC including its own dedicated offset, gain and sample-and-hold circuitry (Column 9, lines 29-31). Seki does not disclose a running optical power controller. In the same field of endeavor, Kelly discloses a running optical power controller (ROPC) that compensates for variations on an optical media (Paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the running optical power controller of Kelly to the laser emission unit of Seki, motivation being that providing these well known components of a pickup apparatus to the wafer disclosed by Seki, rather than its conventional placement on the main board, results in a reduction of manufacturing cost and time (Column 10,

lines 33-41) and a reduction in noise during the communication between components (Column 10, lines 1-8).

Regarding claim 5, Kelly discloses wherein the LDIC further comprises a write strategy generator (WSG) to implement write strategies (Paragraph 67).

Regarding claim 6, the claim contains limitations similar to that of claim 1 (Specifically, the WSG is located on the wafer. Thus, there is no need to communicate over the flex cable with the main board) and is rejected over the same grounds.

Regarding claim 7, Kelly discloses wherein the offset, gain and sample-and-hold circuitry of the PMIC and the PDIC are controlled by a write strategy generator (WSG) located on the main board (Paragraph 67).

Regarding claim 8,9, and 10 these claim contains limitations similar to that of claims 1-3 and is rejected over the same grounds.

Regarding claim 11, the claim contains limitations similar to that of claim 1 and is rejected over the same grounds.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Alunkal whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Korzuch William can be reached on (571)272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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